

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

MONDIS TECHNOLOGY, LTD.,

Plaintiff,

v.

HON HAI PRECISION INDUSTRY CO.
LTD., a/k/a FOXCONN, ET AL.,

Defendants.

MONDIS TECHNOLOGY, LTD.,

Plaintiff,

v.

TOP VICTORY ELECTRONICS (TAIWAN)
CO., LTD., ET AL.,

Defendants.

CIVIL ACTION NO. 2:07-CV-565-TJW

JUDGE: Hon. T. John Ward

(consolidated for claim construction)

CIVIL ACTION NO. 2:08-CV-478-TJW

JUDGE: Hon. T. John Ward

(consolidated for claim construction)

**OPENING BRIEF IN SUPPORT OF
PLAINTIFF'S PROPOSED CLAIM CONSTRUCTIONS**

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	BACKGROUND OF THE TECHNOLOGY	1
	A. ‘812 Patent Family	1
	B. ‘090 Patent Family	2
III.	CLAIM TERMS REQUIRING CONSTRUCTION: THE ‘812 PATENT FAMILY	3
	A. “display unit” / “display apparatus”	3
	B. “a display” / “a display device”	6
	C. “a display controller which ... separates the first signals, the video signals and the synchronization signals”	6
	D. “driving circuit”	7
	E. “bi-directional”	9
	F. Typographical corrections in claim terms	10
	1. “which display an image” (‘236 patent claim 2)	10
	2. “reading our corresponding control data” (‘812 patent claim 1)	10
	3. “an interference circuit” (‘812 patent claim 10)	10
	4. “a reception confirmation signal which indicatives confirmation of receiving” (‘812 patent claim 10) and “a reception confirmation signal which is indicates confirmation of receiving” (‘812 patent claim 11)	11
IV.	CLAIM TERMS REQUIRING CONSTRUCTION: THE ‘090 PATENT FAMILY	11
	A. “means for receiving video signals...”	11
	B. “communication control means...”	12
	C. “memory means for storing...”	13
	D. “display unit”	14

E.	“communication controller”.....	15
F.	“control”.....	19
G.	“bi-directionally communicating” and similar terms.....	21
H.	“signal” and certain limitations containing same.....	21
I.	“display unit information”	23
J.	“communicatable [with]” and limitation containing same	24
K.	Limitations relating to identification	25
1.	“identification number” / “identification number of the display unit”.....	26
2.	“identification information” / “identifying information of the display unit”	27
3.	“identification number for identifying the display unit”	28
4.	“identification number for uniquely identifying the display unit”	29
5.	“identification number for identifying at least a type of said display unit” etc.....	29
V.	CONCLUSION.....	30

TABLE OF AUTHORITIES

	Page(s)
CASES	
<i>CCS Fitness Inc. v. Brunswick Corp.</i> , 288 F.3d 1359 (Fed. Cir. 2002).....	20
<i>Exxon Research & Eng. Co. v. U.S.</i> , 265 F.3d 1371 (Fed. Cir. 2001).....	23
<i>Haemonetics Corp. v. Baxter Healthcare Corp.</i> , 607 F.3d 776 (Fed. Cir. 2010).....	23
<i>Intel Corp. v. Broadcom Corp.</i> , 172 F. Supp.2d 478 (D. Del. 2001).....	6, 22
<i>Ishida Co. v. Taylor</i> , 221 F.3d 1310 (Fed. Cir. 2000).....	11
<i>LG Electronics Inc. v. Bizcom Electronics Inc.</i> , 453 F.3d 1364 (Fed. Cir. 2006).....	4
<i>Renishaw PLC v. Maposs Societa per Azioni</i> , 158 F.3d 1243, 1250 (Fed. Cir. 1998)	22
<i>St. Clair Intellectual Property Consultants v. Matsushita Electronic Indus. Co.</i> , 691 F. Supp.2d 538 (D. Del. 2010).....	13
<i>Ultimax Cement Mfg. Corp. v. CTS Cement Mfg. Corp.</i> , 587 F.3d 1339 (Fed. Cir. 2009).....	10
<i>Wenger Manuf. Inc. v. Coating Mach. Inc.</i> , 239 F.3d 1225 (Fed. Cir. 2001).....	11
<i>Western Union Co. v. Moneygram Int'l.</i> , 2008 WL 5731946 (W.D. Tex. 2008).....	13

TABLE OF EXHIBITS

Exhibit No.	Description	Beginning Bates No.	End Bates No.
1	U.S. Pat. 6,247,090 ('090 family)	MTL 0000304	MTL 0000324
2	U.S. Pat. 6,513,088 ('090 family)	MTL 0001423	MTL 0001445
3	U.S. Pat. 6,549,970 ('090 family)	MTL 0001819	MTL 0001840
4	U.S. Pat. 7,089,342 ('090 family)	MTL 0004269	MTL 0004291
5	U.S. Pat. 7,475,180 ('090 family)	HH 000137	HH 000160
6	U.S. Pat. 7,475,181 ('090 family)	HH 000161	HH 000183
7	U.S. Pat. 6,057,812 ('812 family)	MTL 0000001	MTL 0000020
8	U.S. Pat. 6,304,236 ('812 family)	MTL 0000689	MTL 0000707
9	U.S. Pat. 6,639,588 ('812 family)	MTL 00003522	MTL 000035240
10	U.S. Pat. 6,686,895 ('812 family)	MTL 00003812	MTL 00003830
11	Family tree of '090 patent family		
12	Family tree of '812 patent family		
13	U.S. Pat. 5,138,305 to Tomiyasu	HLTD 0003955 (H 00001559)	HLTD 0004008 (H 000015572)
14	App. Ser. No. 08/644,292 (U.S. Pat. 6,078,301) ('812 family) file history, Amendment 4/13/1999	MTL 153912	MTL 153921
15	App. Ser. No. 08/013,810 (U.S. Pat. 5,457,473) ('812 family) file history, Amendment A and Request for Reconsideration 12/28/1993 ^a	MTL 154039	MTL 154050
16	U.S. Pat. 4,990,904 to Zenda	MTL 0002282	MTL 0002294
17	U.S. Pat. 5,012,339 to Kurata	HLTD 0107866 (H 00001507)	HLTD 0107876 (H 00001517)
18	IEEE Standards Board, <i>IEEE Standard Glossary of Computer Hardware Terminology</i> , approved June 14, 1994	MTL 180705	MTL 180707
19	U.S. Pat. 5,150,109 to Berry	MTL 0002041	MTL 0002046
20	U.S. Pat. 5,216,504 to Webb	MTL 182306	MTL 182329

^a In the Joint Claim Construction Statement submitted by the parties, the date of this document was incorrectly listed as 12/23/1998. JCCS at B2 pp.1, 6.

Exhibit No.	Description	Beginning Bates No.	End Bates No.
21	'812 reexamination file history, Notice of Intent to Issue Ex Parte Reexamination Certificate 12/24/2009	MTL 162182	MTL 1621928
22	App. Ser. No. 08/438,911 ('812 patent) file history, Examiner Interview Summary Record 11/15/1996	MTL 0000165	MTL 0000168
23	U.S. Pat. 5,457,473 ('812 family)		
24	U.S. Pat. 5,138,565 to Satou	MTL 180482	MTL 180492
25	U.S. Pat. 5,483,255 to Numao	MTL 180586	MTL 180653
26	App. Ser. No. 08/013,810 (U.S. Pat. 5,457,473) ('812 family) file history, Examiner Interview Summary Record 3/20/1995	MTL 154095	MTL 154103
27	App. Ser. No. 08/190,848 (abandoned) ('090 family) file history, Amendment 7/20/1995	MTL 154876	MTL 154890
28	App. Ser. No. 10/160,056 ('181 patent) file history, Amendment 7/18/2003 ^b	MTL 010894	MTL 010899
29	'970 reexamination file history, Amdt. & Response 6/18/2010	MTL 171022	MTL 171060
30	<i>Webster's Third New Int'l Dictionary of the English Language Unabridged</i> (1993)	MTL 180694	MTL 180698
31	<i>Webster's Third New Int'l Dictionary of the English Language Unabridged</i> (1993)	MTL 180699	MTL 180701
32	<i>Webster's New World Dictionary of American English</i> , 3 rd College Edition (1988)	MTL 180690	MTL 180693
33	App. Ser. No. 09/265/363 ('970 patent) file history, Amendment 12/20/1999	MTL 154205	MTL 154222
34	'342 reexamination file history, Response 5/19/2010	MTL 182531	MTL 182549
35	App. Ser. No. 10/160,022 ('180 patent) file history, Amendment 8/12/2003	MTL 008760	MTL 008775
36	'090 reexamination file history, Amendment & Response 1/06/2010	MTL 158979	MTL 159002
37	'090 reexamination file history, Notice of Intent to Issue Reexamination Certificate 4/08/2010	MTL 160590	MTL 160598

^b In the Joint Claim Construction Statement submitted by the parties, the date of this document was incorrectly listed as 12/03/2003. JCCS at B1 p.9.

I. INTRODUCTION

Pursuant to Local Patent Rule 4-5(a), Plaintiff Mondis Technology Ltd. (“Mondis”) submits this brief in support of its proposed claim constructions for the above-captioned cases.

There are ten patents-in-suit from two families. Six of these patents (“**the ‘090 family**”) descend from the same priority application: 6,247,090; 6,513,088; 6,549,970; 7,089,342; 7,475,180; and 7,475,181. Four of the ten patents (“**the ‘812 family**”) all descend from a different priority application: 6,057,812; 6,304,236; 6,639,588; and 6,686,895. All ten patents are attached hereto as Exhibits 1 to 10, respectively. Exhibits 11 and 12 are family trees showing the relationships among the patents. For convenience, all specification citations herein are to the ‘090 and ‘812 patents (Exhibits 1 and 7 respectively) unless otherwise noted.

II. BACKGROUND OF THE TECHNOLOGY

The inventions described in the patents-in-suit were developed at the research laboratories of Hitachi, Ltd. and relate to the field of computer and display communication. Hitachi developed the idea of communicating different types of information between a display and a computer to provide certain features and increase user friendliness. In the ‘812 patent family, a communication link is used to convey control instructions from the computer to the monitor, allowing the user to directly control the monitor from a keyboard or mouse. In the ‘090 family, a communication channel is used to convey information about the display to the computer, such as the transfer of an identification number. There are many permutations around these basic ideas which were claimed in the ten patents-in-suit.

A. ‘812 Patent Family

The ‘812 family of patents describes a display unit that is capable of receiving a control signal from an attached computer to adjust the displayed image (e.g., position, brightness). Exh. 7 at 1:10-16; 3:11-18. This provides the benefit of making display configuration more user

friendly since the user can adjust the display directly through the attached computer rather than having to manually manipulate mechanical controls on the display itself. 1:66-2:8; 2:19-25. The control signals to adjust the display can be generated by a user through a computer mouse or keyboard. 4:18-23; 11:3-6. Alternatively, control signals to adjust the image can be generated automatically by software running on the attached computer. 11:20-26.

The display unit is configured to receive three types of signals from a computer: RGB (red, green and blue) video signals which contain the picture information; horizontal and vertical synchronization signals (H_s , V_s) which identify when to draw a new line or screen; and control signals. FIG. 7; 8:23-25; 8:40-47. The control signals may be communicated via a dedicated interface or communication line (FIG. 7; 8:33-47); by being superimposed on the video or sync signals (FIG. 1; 4:57-62); or across a common interface together with the video and sync signals (FIG. 8; 9:19-35). When the display unit receives the control signal, pertinent control data is read out from a memory and used by a microprocessor to adjust the displayed picture. 7:49-60.

The display unit is further capable of sending a reception confirmation signal back to the computer to acknowledge receipt of the control signal. 9:43-50. Hence, the communications between the display and the computer are bi-directional with control signals flowing in one direction and reception confirmation signals flowing in the opposite direction. 9:45-46; 9:50-53. This control channel is of general application to all types of displays.

B. ‘090 Patent Family

The ‘090 family of patents has a priority date one year later than the ‘812 family and shares two common inventors. As in the ‘812 family, the display unit is capable of receiving control instructions from an attached computer via control signals. Exh. 1 at 4:45-54. A microcomputer (*i.e.*, processor) in the display unit can use these control instructions to adjust the displayed image (*e.g.*, size, position, brightness, color) according to the preferences of the user.

4:55-67.

In addition to this control functionality, the '090 family describes the display unit as including a memory. This memory stores information such as user adjustment data, delivery adjustment data, identification ("ID") numbers, and factory preset values. FIG. 2; 5:13-21. The display unit also includes a communication controller that facilitates the sending and receiving of data into and out of the display. 4:26-28; 7:50-53. In addition to being capable of receiving control instructions from an external computer, the communication controller can also send the contents of the memory to the computer. FIG. 1; 5:61-66; 10:62-63. Hence, the communication controller in the display unit supports bi-directional communications with the computer.

In the preferred embodiments, the display's ID number can be used by the computer to identify a particular display unit from among others. 7:22-26 (different ID assigned to each display); 6:6 ("specific display device"). The ability to identify a display facilitates features such as enhanced security by being able to prevent the display of information on an unauthorized display unit. 10:38-42. The ID number can also inform the computer that the monitor supports certain features, such as being able to receive control instructions to adjust the image. 5:66-6:4.

III. CLAIM TERMS REQUIRING CONSTRUCTION: THE '812 PATENT FAMILY

A. "display unit" / "display apparatus"

Defendants all seek to limit the broad terms "display unit" and "display apparatus" to a specific display technology, namely cathode-ray tube. *See* Joint Claim Construction Statement ("JCCS"), Doc. 126 at A2 p.1. There is no reasonable debate regarding whether the words "display unit" or "display apparatus" convey to one of skill in the art a class of devices that would include, but not be limited to, CRT-type displays. Defendants' narrow construction is a thinly veiled attempt to narrow the claims to avoid infringement, but there is nothing in the intrinsic or extrinsic record which supports their request that the Court abandon plain meaning.

First, the plain language of the claims broadly recites “display unit” and “display apparatus” generally, and these terms are not facially limited to a particular display type (e.g., CRT).

Second, the written description, like the claims, consistently refers broadly to a “display unit” and “display apparatus.” *See, e.g.*, Exh. 7 at 1:10-19 (broadly describing the present invention as “an image display apparatus”). The Patent Owner stated that the “image display apparatus of the present invention” could be used with “an advanced personal computer using a display unit.” 1:16-19. There was no indication that the inventors thought this display unit was limited to one type of technology, let alone CRT technology. Pointedly, none of the general descriptions of the invention even mention a CRT. *See Abstract & Summary Of The Invention.*

Third, additional intrinsic evidence such as prior art cited in the file histories¹ demonstrates that display units were known to encompass many display types and not just CRT’s. For instance, Tomiyasu (cited on face of ‘812 patent) describes “display unit” as including CRT’s, liquid crystal displays, electroluminescent displays, and plasma displays. Exh. 13 (Tomiyasu) at 1:20-23; 4:10-13. Indeed, in discussing this reference during prosecution, the Patent Owner expressly acknowledged that “display” includes display types other than CRT. *See* Exh. 14 (‘812 prosecution amendment) at MTL153920 (“a change control circuit 21 changes parameters according to types of displays such as a CRT and a plasma display...”). The Patent Owner made a similar prosecution comment while discussing the Berry prior art reference. Exh.15 (‘812 family prosecution amendment) at MTL 154049 (“The Berry patent discloses a VGA video card for a PC used with a CRT or a flat panel display of a liquid crystal display

¹ Prior art cited during prosecution constitutes intrinsic evidence. *LG Electronics Inc. v. Bizcom Electronics Inc.*, 453 F.3d 1364, 1375 (Fed. Cir. 2006).

unit"). *See also* Exh. 16 (Zenda, cited on face of '812 patent) at 1:11-13 ("plasma display apparatus"); Exh. 17 (Kurata, cited on face of '812 patent) at 1:8-12 ("display apparatus" includes "liquid crystal displays and plasma displays").

Fourth, extrinsic evidence confirms that "display unit" was not limited to CRTs. Industry standards at the time recognized that "display unit" was a broad term simply denoting "[a]n output device that gives a visual representation of data." Exh. 18, *IEEE Standard Glossary of Computer Hardware Terminology* (1994) at MTL 180706-7.

To support their narrow constructions, InnoLux and TPV offer various cites from the specification. *See* JCCS at C2 p.1, D2 p.1, E2 p.1. But, the vast majority of these citations are from preferred embodiments, which cannot be read into the claims. The only references to CRT that are *not* taken from preferred embodiments refer to what the specification explicitly calls a *conventional* display unit. 1:31-32 ("The conventional display unit is directed to a multi-scan type CRT display unit"); 1:56-57 ("This conventional display unit is directed to a CRT display apparatus"). This merely shows that CRTs were *one* kind of conventional display. As demonstrated by the intrinsic prior art described above, other types were also known. *See also* Exh. 19 (Berry, cited on face of '812 patent) at 2:55-59 ("conventional CRT and flat panel displays"); *see also* Exh. 16 at 1:13-15 ("A conventional plasma display apparatus").

Hon Hai further proposes limiting "display unit" not simply to CRTs, but to CRT computer monitors. *See* JCCS at D2 p.1. None of Hon Hai's cited evidence justifies importing this additional limitation into the claim term. Indeed, the intrinsic record shows that "display" was not limited to computer monitors but included other types of monitors such as televisions.

See, e.g., Exh. 20 (Webb, cited in ‘812 reexamination file history²) at 1:6-8.

In view of the foregoing, the Court should adopt Mondis’s ordinary meaning construction “an apparatus for displaying video signals.”

B. “a display” / “a display device”

These terms appear in asserted claims 1, 2, 4, 7 and 10 of the ‘812 patent. As recited in the claims, “a display” or “display device” is the component of a larger display unit which actually displays the image. The Defendants again try to limit the display to a CRT, citing much the same evidence they rely on for “display unit.” *See* JCCS at C2 p.2, D2 p.1, E2 pp. 3-5. This would be improper for the reasons set forth above.

C. “a display controller which … separates the first signals, the video signals and the synchronization signals”

This limitation appears in claim 2 of the ‘812 patent. Mondis believes that the limitation is clear on its face and does not require construction. Defendants propose adding “superimposed” as a modifier of “first signals.” JCCS at A2 p.1. Defendants rely on portions of the specification describing a “control signal separation circuit” (element 18 of FIG. 1). *Id.* at C2 p.2, D2 p.1, E2 p.5.

Defendants’ construction is incorrect for several reasons. First, it ignores the plain language of claim 2. This claim fully recites the functions of the display controller and contains no requirement that the first signals be “superimposed.” Further, it is improper to insert an adjective (here “superimposed”) in front of an unmodified noun in the claim (here “first signals”). *Intel Corp. v. Broadcom Corp.*, 172 F. Supp.2d 478, 489-90 (D. Del. 2001) (“Moreover, the Federal Circuit has repeatedly stated that it is improper to add a limiting

² *See* Exh. 21 (Notice of Intent to Issue Ex Parte Reexamination Certificate) at MTL 162185.

adjective or adverb before a term that stands unmodified in the claim.”).

Second, reading “superimposed” into the claim would effectively import the “control signal separation circuit” (element 18 of FIG. 1) into the claim, since this structure would be needed to separate such a superimposed control signal from the other signals. *See* 4:56-5:5. Thus, Defendants’ construction does not merely insert an innocuous word, but effectively imports an entire unclaimed structural circuit into the claim from the preferred embodiments.

Third, the specification contradicts Defendants’ construction. More particularly, the patent explains that image data and control signals can be transmitted together as different portions of an “image information” signal. 9:19-23. This transmission can be in accordance with any standard interface specification, such as the parallel SCSI standard. *Id.* The display controller then uses the distinct portions of the “image information” to produce separate control, synchronization, and video RGB signals. 9:24-35. One of skill in the art would understand that simultaneously transmitting the image data and control signal in this fashion is not the same as, and does not require, “superimposing” one signal on another. The absence of a “control signal addition circuit” and “control signal separation circuit” in FIG. 8 confirms this understanding.

The prosecution history of the ‘812 patent also contradicts Defendants’ construction. The drawing “FIG. 8 of our Invention,” presented in an Examiner Interview, shows the RGB video signals, the H/V sync signals and the communication control signals being sent on different lines within a cable, rather than the communication signals being superimposed. Exh. 22 (Examiner Interview Summary Record) at MTL 0000166.

In view of the foregoing intrinsic evidence, the Court should reject Defendant’s attempt to insert the word “superimposed” into the claims.

D. “driving circuit”

This limitation is recited in asserted claims 1, 2, 4, 7 and 10 of the ‘812 patent. Each of

these claims recites that the driving circuit “receives a synchronization signal” (or “signal portion”) from a computer, and that the driving circuit, together with the video circuit³, produces signals that control the display device.⁴ The crux of the dispute is whether “driving circuit” should be limited to a specific structure depicted in the preferred embodiments. Mondis’s construction – “a circuit that uses synchronization signals to control the display device” – is firmly rooted in the claim language and captures the claimed features of the driving circuit: receiving synchronization signals as inputs, and controlling the display device.

The Defendants propose that “driving circuit” be equated with “deflection circuit,” a specific type of circuit shown in the preferred embodiments, but if the Patent Owner had meant to claim a deflection circuit, it would have said just that. Indeed, the Patent Owner did just that in a related patent. Exh. 23 (‘473 patent) at claim 1. Further, Defendants’ specification citations are taken entirely from preferred embodiments and none of these passages purport to limit the invention as a whole. JCCS at C2 p.3, D2 p.1, E2 pp. 5-7. Next, Defendants repeat the same file history and extrinsic citations as used in their attempt to limit “display unit” and “display device” to CRTs, presumably because it is their contention that both driving circuits and deflection circuits are CRT-specific. *Id.* This evidence is inapposite because the claims are not limited to CRTs, for the reasons already discussed.

Further, the intrinsic and extrinsic evidence show that driving circuits are *not* limited to CRTs, as Defendants’ constructions and evidence appear to assume, but can be found in other

³ According to claims 1, 2, 4 and 7, the video circuit receives the other portion of the image data, namely “the video signal portion.” Claim 10 is similar.

⁴ See ‘812 patent claim 1 (“a display device controlled by signals from the video and driving circuits to generate the displayed image”); claim 2 (“a display controlled by signals from the video and driving circuits to generate a displayed image”); claims 4, 7 and 10 (“a display device which is controlled by signals from the video and drive circuits to generate the displayed image”).

types of display units as well. For example, the file history describes “a video signal driving circuit for a flat panel display.” Exh. 15 at MTL154049 (discussing Kurata). Extrinsic prior art also describes driving circuits for non-CRT displays. *See, e.g.*, Exh. 24 (Satou) at 4:21-24 (“including an electronic circuit board...for driving the flat panel display 17”); Exh. 25 (Numao) at FIG. 3; 1:8-9; 9:23-25 (describing “a scanning side drive circuit 11 and a signal side drive circuit 12” for a “ferroelectric liquid crystal” display).

In view of the foregoing, the Court should reject Defendants’ attempt to convert the claim language “driving circuit” into “deflection circuit” and instead adopt Mondis’s construction.

E. “bi-directional”

This term appears in several asserted claims of the ‘812 patent in the context of a “bi-directional [interface] cable.” Three of the parties, including two of the Defendants, agree that “bi-directional” in these claims possesses its ordinary meaning and does not require further construction. Hon Hai proposes a construction of “providing a communication path in either direction between two or more communication controllers.” JCCS at A2 p.1.

The specification makes clear that the crux of this limitation is simply the capability of transmitting information in two directions, rather than just one. *See, e.g.*, 8:48-52 (“since the control signal is transmitted and received by means of the general-purpose interface, bidirectional communication between the display unit 1d and the computer body 1c can be made”); 9:45-47 (“since the interfaces between the computer body and the display unit 1f have the capability for bidirectional communication...”). The prosecution history confirms this understanding. For example, in prosecution of the related ‘301 patent, the Patent Owner explained that “This array of *incoming and outgoing* signals passes through a common interface.” Exh. 14 (‘301 prosecution amendment) at MTL 153919 (emphasis added).

Hon Hai’s proposed construction has two flaws. First, “providing a communication path

in either direction” merely elongates the claim language without clarifying it. Second, Hon Hai would add the limitation “between two or more communication controllers.” However, as used in the claims and as explained in the above-cited specification passages, which Hon Hai also cites (*see* JCCS at D2 p.1), the term “bi-directional” plainly refers to the capability of the cable interface, and is agnostic as to other components. Moreover, neither the figures nor specification make any mention of communication controllers. Hon Hai’s proposed construction is unsupportable.

F. Typographical corrections in claim terms

Mondis requests that the Court correct a few unambiguous typographical errors. *Ultimax Cement Mfg. Corp. v. CTS Cement Mfg. Corp.*, 587 F.3d 1339, 1353 (Fed. Cir. 2009) (courts may correct obvious typographical errors in view of claim language and specification).

1. “which display an image” (‘236 patent claim 2)

This limitation is directly analogous to the limitation in claim 1 reciting “which displays an image.” This phrase is also grammatically parallel to the preceding phrase in claim 1: “which receivess a video signal and a synchronization signal.” Hence “display” should be “displays.”

2. “reading our corresponding control data” (‘812 patent claim 1)

The claims and specification repeatedly refer to *reading out* data. *See, e.g.*, ‘812 patent claim 4 (“the stored control data is *read out* by the second control signal”); claim 7 (“the stored control data is *read out* by the second communication signal”); claims 10-11 (“the stored control data is *read out* by the control signal”); 1:35-39 (“The information...is *read out* from the memory”) (emphasis added). Hence, “our” should be corrected to “out.”

3. “an interference circuit” (‘812 patent claim 10)

This limitation is directly analogous to similar limitations in claims 4, 7, and 11 reciting “an *interface* circuit which (1) inputs....” The word “interference” is an obvious typographical

error since the written description never uses the term “interference.”

4. **“a reception confirmation signal which indicates confirmation of receiving” (‘812 patent claim 10) and “a reception confirmation signal which is indicates confirmation of receiving” (‘812 patent claim 11)**

These limitations are analogous to similar limitations in claims 1, 4 and 7, each of which recites a “signal which *indicates* confirmation of receiving.” Simple comparison of claim language reveals that the phrasings in claims 10 and 11 are inadvertent mistakes.

IV. CLAIM TERMS REQUIRING CONSTRUCTION: THE ‘090 PATENT FAMILY

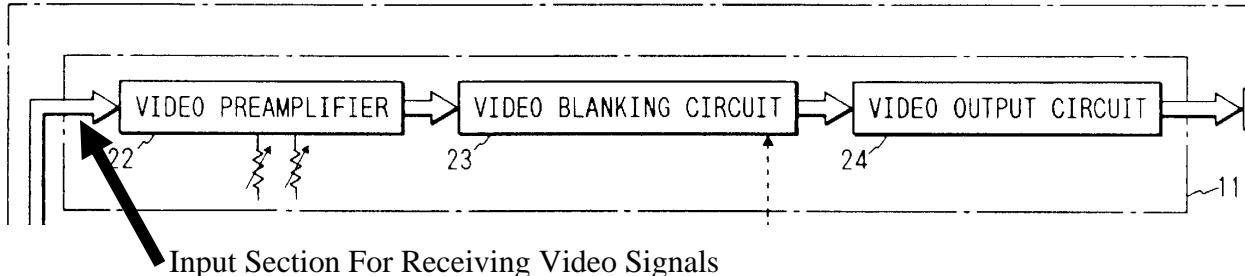
A. “means for receiving video signals...”

This means-plus-function limitation appears in claim 1 of the ‘090 patent and claims 1, 14 and 18 of the ‘088 patent. The parties dispute the corresponding structures for the claimed functions. JCCS at A1 p.1. The claim should be construed to include all the alternative corresponding structures described for performing the claimed function. *Ishida Co. v. Taylor*, 221 F.3d 1310, 1316 (Fed. Cir. 2000). Further, only as much structure as necessary to perform the claimed function should be identified. *Wenger Manuf. Inc. v. Coating Mach. Inc.*, 239 F.3d 1225, 1233 (Fed. Cir. 2001).

The Defendants cite video circuit 11 as corresponding structure. JCCS at C1 p.1, D1 p.1, E1 p.1. However, the entirety of the video circuit is not clearly linked with the function of “receiving video signals...” Video circuit 11 is depicted in FIG. 4 and described as comprising a video preamplifier circuit 22, video blanking circuit 23, and video output circuit 24. Exh. 1 at 6:37-41. These portions of the video circuit perform the functions of amplifying, blanking, and outputting rather than receiving. Plainly, a signal cannot be amplified until after it has been received, and hence the initial function of receiving is necessarily performed by an input portion of the video circuit that is upstream of the preamplifier, blanking, and output circuits.

Thus, the input section of the video circuit and the input section of the preamplifier sub-

circuit comprise corresponding structures. This is depicted in FIGS. 1 and 4 by the arrow carrying the video signal intersecting with the boxes labeled “video circuit 11” and “video preamplifier 22.” The pertinent part of FIG. 4 is reproduced below:



The specification also teaches to one of ordinary skill that there are physical terminals for receiving the video signal from the video source. In particular, “[e]ach of the display devices 6B, 6C and 6D has a plurality of *video signal I/O terminals*.” 7:20-22 (emphasis added). One of ordinary skill would understand that “I/O” refers to Input/Output and that a terminal for inputting is the same as a terminal for receiving. Hence, the video signal I/O terminals also comprise a corresponding structure. Extrinsic evidence confirms this understanding. *See* Exh. 26 (‘812 family prosecution history) at MTL 154102 (“claim 19, like conventional display units, has terminals for receiving video and synchronization signals”).

Finally, FIG. 5 depicts three displays, each receiving video signals from computer 1 via lines V1, V2 and V3. One of ordinary skill would understand that these lines plug into cable terminations. These cable terminations are yet an additional structure for receiving video signals.

B. “communication control means...”

While the parties agree that communication controllers 8 and 25 are corresponding structure, Mondis believes the specification identifies additional alternative structures. JCCS at A1 p.2. For instance, the specification identifies six different communications interfaces for enabling and controlling bi-directional communications between the display and a computer:

According to this embodiment, RS-232C is used as a ***communication interface***. However, a general-purpose interface such as RS-422, RS-423, SCSI or GP-IB, or network interface may be used.

6:10-13 (emphasis added). Further, the specification also links these interfaces to the function of communication control:

The ***interface*** part of the above display device 6 ***such as the communication control*** terminal is mounted on the back or side of the display device

5:7-10 (emphasis added). *See also* 2:52-53 (“second communication means has a plurality of communication interfaces”). In view of the foregoing, the disclosed communication control interfaces should also be identified as alternative corresponding structures.

C. “***memory means for storing...***”

The principal dispute is whether the “memory means for storing ...” limitations are governed by 35 U.S. § 112 ¶ 6. JCCS at A1 p.3. While the term “means” triggers a presumption that a limitation is written in means-plus-function form, this presumption is rebutted here because the limitation describes sufficient structure for performing the claimed function. The claims at issue recite a “***memory*** means for storing” One of ordinary skill would understand a “memory” to be known structure for storing data, including display unit information and identification numbers as recited in the claimed functions. Because the limitations themselves identify a structure – a memory – capable of performing the claimed functions, these limitations are not within the ambit of § 112 ¶ 6. Indeed, this has been the holding of several Courts construing similar “memory means” limitations. *See St. Clair Intellectual Property Consultants v. Matsushita Electronic Indus. Co.*, 691 F. Supp.2d 538, 558 (D. Del. 2010); *Western Union Co. v. Moneygram Int'l.*, 2008 WL 5731946, *12 (W.D. Tex. 2008).

Should the Court finds these limitations to be in means-plus-function form, the parties agree on the claimed functions but disagree on the wording of the corresponding structure.

Mondis proposes that it is simply a “memory” whereas Defendants contend it is “memory device 9.” JCCS at A1 p.3. While these constructions appear similar, Defendants include the extraneous word “device.” However, the patent nowhere describes a “memory device,” instead denoting the structure as simply a “memory.” 5:13-16; 6:54-56. The term “device” should be rejected as unsupported surplusage.

D. “display unit”

As with the ‘812 family, Defendants seek to limit the broad term “display unit” to a CRT. Once again, this narrowing construction is contradicted by the intrinsic and extrinsic evidence.

First, the plain language of the claims recites “display unit” generally and is not limited to any particular type of display unit. Indeed, some of the claims explicitly contemplate multiple types of display units. *See* ‘180 patent claims 1, 14, 21, 23, 25 and 26 (“an identification number for identifying at least a type of said display unit”).

Second, the specification shows that “display unit” cannot properly be limited to CRTs alone. The Background of the Invention indicates that the “present invention” is broadly applicable to an “information output system or display apparatus.” 1:18-20. Similarly, the Summary of the Invention refers broadly to an “information output device” and makes no mention of CRTs or any other specific display type. 2:31-34. Moreover, the specification describes liquid crystal displays in addition to CRTs. *See* FIG. 9 element 34; 8:54-58 (“a liquid crystal display panel mounted in the display device 6F”); 9:1-4.

Third, the file history and intrinsic prior art cited therein show that the term “display unit” encompasses multiple display types, including at least plasma and LCD displays in addition to CRTs. *See, e.g.*, Exh. 27 (‘090 family prosecution amendment) at MTL154886 (“the type of display can be considered … a liquid crystal display 34 as illustrated in Figs. 9 and 10, for example.”); Exh.13 (Tomiyasu, cited on face of ‘088 patent) at 1:20-23 (“display unit” includes

“liquid crystal display,’ “electroluminescent display” and “plasma display”); Exh. 24 (Satou, cited on face of ‘180 patent) at 4:21-22 (“display unit” includes “liquid crystal display”).

Fourth, as noted above in regard to the ‘812 patent, extrinsic evidence (*e.g.*, IEEE standards) confirms that “display unit” was not limited to CRTs. Exh. 18 at MTL 180706-7.

Hon Hai further proposes limiting “display unit” to computer monitors. JCCS at A1 p.3. However, the intrinsic evidence shows that “display[s]” were known in the art to encompass television sets as well as computer terminals. *See, e.g.*, Exh. 20 (Webb, cited on face of ‘342 patent) at 1:6-12. There is simply no evidence that the Patent Owner intended to exclude displays other than computer monitors from the scope of the claims.

E. “communication controller”

Mondis agrees with TPV that no construction is necessary. JCCS at A1 p.4. Two of the Defendants want the term construed, but in the guise of construction, they seek to import limitations specifying the functions for which the communication controller can be used. To the extent that the term needs to be construed at all, it is simply “a controller that manages communications.”

InnoLux proposes the construction “a device that manages communications for a processing unit and other elements of a display unit.” The first difference between Mondis’s and InnoLux’s proposed constructions is that InnoLux’s definition includes the language ***“for a processing unit and other elements of a display unit.”*** Mondis submits that this language does not serve to define what a communication controller is. Instead, this language attempts to improperly limit the claims by requiring the communication controller to be connected to particular elements within a display, namely a “processor.”

Most of the asserted claims of the ‘090 family, with a few exceptions discussed below,

make no reference at all to the communication controller performing the function of managing communications for a “processor.” Significantly, the claim language itself expressly sets forth the functional requirements for the communication controller. For instance, the asserted claims describe the “communication controller” as performing the general function of “bi-directionally communicating with the video source” or similar language. *See, e.g.*, ‘090 patent claims 1 and 3; ‘088 patent claims 1, 5, 10, 14, 22; ‘970 patent claims 20, 21, 23, 27; ‘180 patent claims 1, 14. Additionally, the communication controller is also described in the claims as being used to send display unit information or an identification number from the display unit to the video source. *See id.* InnoLux’s attempt to incorporate the additional functional requirement that the communication controller must manage communications for a “processor” should be rejected since most claims make no reference to a processor yet otherwise expressly set forth the functional requirements for the communication controller.

Furthermore, nothing in the specification suggests that the ordinary meaning of “communications controller” includes a requirement that such a controller must be connected to a processor and configured to manage communications for same. Instead, the specification repeatedly describes the “communication controller” in broad and general terms. For instance:

- “... 8 a second communication controller **for communicating** with the above mentioned communication controller 5...” (4:26-28) (emphasis added)
- “The communication controller 25 **sends or receives data** to or from the computer 1 in the same was as the communication controller 8 of the display device 6...” (7:50-54) (emphasis added)
- “When the computer 1B and the display device 6E are started at Step 10 as shown in Fig. 8, they start **communication** with each other via the communication controllers 5 and 8 at Step 11 next.” (8:5-8) (emphasis added)

As can be seen by the foregoing, the communication controller simply manages communications (*i.e.*, the sending and receiving of information). Indeed, the specification describes a number of

different controllers, including an Audio Controller, Display Controller and LCD Controller. *See* FIG. 9 elements 31, 3 and 33; 4:17-18; 8:23-24; 8:55-56. Each of these controllers, like the communication controller, simply controls or manages the function for which it is responsible. In short, the Patent Owner repeatedly joined the word “controller” together with a word simply indicating the general function being managed.

While some of the preferred embodiments describe the communication controller as sending control instructions to a processor that have been received from a computer, there are also examples of the communication controller managing communications without the involvement of the processor. For instance, FIG. 1 depicts a memory 9 in the display unit that stores various display unit information. This information includes identification numbers. *See* FIG. 2, 5:13-16. The memory is shown in FIG. 1 as being directly connected to the communication controller. The identification number stored in the memory is sent to the computer. 5:59-64. Hence, the communication controller, which is situated directly between memory 9 and computer 1, plainly manages the communication of the memory’s contents without the involvement of the processor. Indeed, this is explicitly claimed in various claims of the ‘090 family. *See, e.g.*, ‘970 patent at claim 20 (“a communication controller connected to said memory which sends said identification number stored in said memory to said computer”).

Claim differentiation and the prosecution history also demonstrate that the communication controller does not need to be connected to, or manage communications for, the display unit’s processor. The fact that claim 1 (*e.g.*) of the ‘181 patent explicitly requires the communication controller to communicate information for this processor whereas claim 1 (*e.g.*) of the ‘088 patent does not, indicates that the term “communication controller” itself does not require a processor to be connected. Indeed, during prosecution of the ‘181 patent, the Patent

Owner emphasized this very point in response to an obviousness-type double-patenting rejection:

Applicants also note that claim 1 of the ['088] patent ***does not recite “a processor”*** as recited in claim 1 of this application.... In contradistinction, as recited in claim 1 of this application [for '181 patent], ***“the communication controller communicates information received from the video source to the processor.”*** Applicants submit that the recited operation of the communication controller in claim 1 of U.S. Patent No. 6,513,088 is diametrically opposed to the operation as recited in claim 1 of this application, in that claim 1 of U.S. Patent No. 6,513,088, “communicates information to the video source”, whereas the present claimed invention recites the feature that the communication controller communicates information received from the video source to the processor.

Exh. 28 ('181 prosecution amendment) at MTL 010898 (emphasis changed); *see also id.* at MTL 010896 (“Examiner acknowledged the lacking of the feature.”). Hence, limiting “communication controller” to something that manages communications for a processor should be rejected. *See also* '970 patent at claim 20 (reciting a “communication controller” but no processor) and claim 25 (reciting both a “communication controller” and a “processor”).

The second difference between Mondis’s and InnoLux’s proposed constructions is that InnoLux includes the extraneous word “device” in its construction. However, “device” is never used in the claims or specification in conjunction with the term “communication controller.” Nor is there any clear need to alter the claim term “controller” by changing it to “device.” In view of the foregoing, the Court should reject InnoLux’s proposed construction and adopt Mondis’s.

Like InnoLux, Hon Hai would require the communication controller to manage communications for “processing elements” of the display, and also employs the surplusage term “device” in its construction. JCCS at A1 p.4. These are erroneous for the reasons stated above. Hon Hai additionally would further limit the claims by functionally requiring the communication controller to manage communications between two sets of processing elements: those in the display and those in the computer. *Id.* Plainly, Hon Hai’s construction should be rejected because it does not seek to define what a communication controller is, but merely seeks to limit

the communication controller to how it is used in some of the preferred embodiments.

F. “control”

The parties dispute the proper construction of the term “control” in the context of “a processor adapted to control display of the display unit,” as recited in claims 23, 25 and 27 of the ‘970 patent and claim 1 of the ‘181 patent. The Defendants’ proposed construction is “to direct, regulate, or influence.” JCCS at A1 p.4. Divorced of any context from the intrinsic evidence, this would be an appropriate ordinary meaning construction of the verb “to control.” However, the intrinsic record makes clear that the term was intended to have a more precise meaning, and refers specifically to “receiving and applying control instructions to adjust an image.”

The specification teaches a display capable of receiving control instructions, wherein the processor in the display applies the control instruction so as to adjust the displayed image. As shown in FIGs. 1, 7, 9, 10 and 11, the only signal received from the video source by the processor (microcomputer 7) in the display unit is the control signal conveying the control instruction. The RGB video signals from the computer are routed to video circuit 11, and the H/V sync signals from the computer are directly fed to deflection circuit 10. Hence, the only signal the display unit processor can use “to control” the display is the one conveying the control instructions from the computer.

As further explained by the specification, the processor (microcomputer 7) in turn uses the control instructions to adjust the image. For instance, the specification states:

- “The microcomputer 7 identifies this **control** instruction and generates **control** signals to the relevant portions to be adjusted in the deflection circuit 10 or video circuit 11... By doing this, the **display size and position, brightness, contrast, and hue of images displayed on the CDT 14 are made most suitable** to a user of the computer system.” (4:57-67) (emphasis added)
- “... the microcomputer 7 decodes the [control] instructions and outputs the control code...and **controls the display size, position, and hue of the image**

displayed..." (8:37-44) (emphasis added)

See also 5:41-45 and 6:5-9.

Importantly, during reexamination of the '970 patent, claims 23, 25 and 27 were rejected as anticipated by U.S. Pat. No. 5,285,197 to Schmidt. Schmidt taught the use of a "processor" that outputs signals called "control signals" to a circuit within the display unit. Exh. 29 ('970 reexamination response) at MTL 171054.⁵ In response to the rejection, the Patent Owner explained that "the 'control' exercised by the processor of claims 23, 25, 27 and 28 refers to receiving and applying control instructions from a computer to adjust image parameters such as brightness, contrast, position, etc." *Id.* at MTL 171051-52. Indeed, the Patent Owner advanced this same definition twice. *Id.* The Patent Owner then proceeded to explicitly and unambiguously distinguish Schmidt on the basis of this express definition. *See id.* at MTL 171054-55 (explaining that while Schmidt possessed a processor to control the display's circuits, this processor "does not receive control instructions [to] control or adjust the displayed image.... Schmidt is not using the term 'control' in the manner used by claims 23, 25, 27 and 28"). In view of the foregoing, the Patent Owner in this case indisputably chose to act as its own lexicographer and narrowed the ordinary meaning of "control" specifically for the purpose of distinguishing prior art. It is this narrower meaning that should then be adopted by the Court as the appropriate construction for this term. *See CCS Fitness Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002) ("the claim term will not receive its ordinary meaning if the Patent

⁵ Certain documents submitted during reexamination were expunged for reasons of stylistic non-conformity with PTO standards, and were replaced by conforming documents identical in content. In the Joint Claim Construction Statement submitted by the parties, some of the citations to reexamination documents inadvertently used the Bates numbers of the expunged documents, rather than the documents of record. In this brief, the Bates numbers of documents of record are used.

Owner acted as his own lexicographer and clearly set forth a definition of the disputed claim term in either the specification or prosecution history”).

G. “bi-directionally communicating” and similar terms

Three of the parties, including two of the Defendants, agree that these phrases possess their ordinary meaning and do not require further construction by the Court. JCCS at A1 p.4. On the other hand, Hon Hai proposes a construction of “providing a communication path in either direction between two or more communication controllers.” The three-party consensus is amply supported by the specification, which describes communication quite broadly as the sending or receiving of data. *See* 8:5-8 (“When the computer 1B and display device 6E are started at Step 10 as shown in Fig. 8, they start communication with each other via the communication controllers 5 and 8”); 7:50-52 (“The communication controller 25 sends or receives data to or from the computer 1 in the same way as the communication controller 8”). It is further supported by the ordinary meaning of “communicate.” *See* Exh. 30, *Webster’s Third New Int’l Dictionary* at MTL 180696. To the extent construction is needed, Mondis proposes “sending and receiving information or messages.”

Hon Hai’s proposed construction should be rejected for at least two reasons. First, “providing a communication path in either direction” merely elongates the claim language without clarifying it. Second, Hon Hai seeks to import two structural elements (“two or more communication controllers”) as additional limitations on the claim that are plainly not justified under the ordinary meanings of the verb “communicate” and its adverb “bi-directionally.”

H. “signal” and certain limitations containing same

The crux of the dispute between the parties is that for certain limitations containing the term “signal,” the Defendants seek to replace the word “signal” with the term “control instruction.” JCCS at A1 pp. 4-5. As explained below, no principled reason exists for converting

“signal” into “control instruction” as that is plainly not the meaning of “signal.”

The ubiquitous term “signal” has a well understood ordinary meaning. *See* Exh. 31, *Webster’s Third New Int’l Dictionary* at MTL 180701 (“A detectable physical quantity or impulse (as a voltage, current, magnetic field strength) by which messages or information can be transmitted”). Indeed, Defendants do not appear to contest that this is the ordinary meaning of “signal” and proffer no contrary construction. JCCS at A1 pp. 4-5.

Nevertheless, Defendants attempt to limit the broad ordinary meaning of “signal” by inserting the word “control.” However, the specification is clear that “signal” is neither limited to nor necessarily conveys the notion of “control.” In fact, the specification discusses several types of signals other than ones that control: “video signals” (1:27-30); “various signals” (4:17-18); “synchronizing signal” (6:32-33); and “audio signal” (9:25). Further, it is generally improper to insert a modifying adjective such as “control” in front of an unmodified claim term such as “signal.” *See Renishaw PLC v. Maposs Societa per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998); *Intel*, 172 F. Supp.2d at 489-90. Here, it is doubly improper for Defendants to convert the claim term “signal” to “instruction” and then also add the adjective “control.”

Furthermore, the actual claims in the ‘090 family demonstrate that the Patent Owner was perfectly capable of claiming “control” signals when it wanted. For example, claim 25 of the ‘180 patent recites a display unit capable of “receiving a **control signal** received from said video source,” while claim 26 recites a display unit capable of “receiving a **signal** from said video source.” This plainly shows that the claim term “signal” was not intended to include the notion of “control” unless that adjective was included in the claim language.

Similarly, in addition to using the bare term “a signal,” claim 26 of the ‘180 patent also includes a different limitation that states “the display unit being capable of controlling said

displayed image on said display unit by using *a control signal* received from said video source....” Hence, claim 26 itself shows that “signal” and “control signal” are not commensurate, else there would be no need to use these separate terms in the same claim.⁶

While certain preferred embodiments indicate that communication controller 5 of computer 1 “sends the control instruction of the display device to the display device 6” (4:52-54), nothing in the specification equates or defines a “signal” to be a “control instruction.” Undoubtedly, a control instruction to, for example, adjust the brightness of the image, is communicated using a “signal,” but this does not demonstrate that a “signal” is a control instruction or that a signal can only be used to communicate a control instruction. Hence, Defendants’ proposed construction is not geared towards interpreting the actual meaning of “signal” but is instead nothing more than an improper attempt to rewrite the claims.

I. **“display unit information”**

Hon Hai contends that this term is indefinite and, necessarily, that all claims containing this term are invalid.⁷ JCCS at A1 p.6. Indefiniteness is an issue that goes to a claim’s validity. *See Exxon Research & Eng. Co. v. U.S.*, 265 F.3d 1371, 1380 (Fed. Cir. 2001). As a result, Mondis is entitled to the statutory presumption of validity and Hon Hai must prove indefiniteness by clear and convincing evidence. *Haemonetics Corp. v. Baxter Healthcare Corp.*, 607 F.3d 776, 783 (Fed. Cir. 2010). Further, to prove indefiniteness, Hon Hai must show that the term “display unit information” is “insolubly ambiguous.” *Exxon*, 265 F.3d at 1375.

⁶ Note also that the claim recites “*a* control signal” rather than *the* or *said* control signal, as would have been the case if “signal” were the same as “control signal” and the former provided antecedent basis for the latter.

⁷ Notably, Hon Hai believes that “display unit” by itself is definite and provides a construction, albeit an erroneous one, for this term. *See* JCCS at A1 p.3.

There is nothing insolubly ambiguous about “display unit information.” Indeed, the ordinary meaning is so clear – information relating to the display unit – that three of the four parties do not believe construction of this term is warranted.⁸ JCCS at A1 p.6. To the extent that one of ordinary skill would need any guidance as to the meaning of “display unit information,” the specification provides numerous examples of information relating to the display unit. For instance, the specification describes the display unit as possessing a memory storing various types of “information” relating to the display unit. More particularly, the specification states:

In this case, necessary **information** is all written into the memory 9 in **the display** device 6. FIG. 2 is a memory map showing the contents of the memory 9 in the display device 6.

5:13-16 (emphasis added). Figure 2 depicts various types of display unit information stored in the memory. These include “Registered ID Numbers”⁹ and “Delivery Adjustment” data. In addition, the specification states that the memory contains data such as factory “preset values.” 5:16-26. All of the foregoing examples would plainly serve to inform one of ordinary skill as to the scope and meaning of “display unit information” should there be any doubt.

In view of the foregoing, Hon Hai’s request that “display unit information” be deemed indefinite, and that all claims possessing this term be held invalid, should be denied.

J. “communicatable [with]” and limitation containing same

The parties dispute the meaning of “communicatable with” and the full limitation containing this term, which appears in claims 18-21 of the ‘970 patent. JCCS at A1 p.7. Mondis’s, Innolux’s, and Hon Hai’s proposed constructions for “communicatable [with]” are

⁸ Even Hon Hai offers “plain and ordinary meaning” as an alternative to its indefiniteness argument. JCCS at A1 p.6.

⁹ As explained in the specification, the ID number can be an ID number for the display unit. *See, e.g.*, 7:22-26 (display devices 6B, 6C and 6D assigned ID numbers 1, 2 and 3, respectively).

similar and probably not substantively distinct. However, Mondis's proposed construction is to be preferred because Mondis acted as its own lexicographer during prosecution and expressly defined "communicatable with" to mean "capable of receiving control instructions" and distinguished prior art on this basis. Exh. 29 ('970 reexamination response) at MTL 171033-36.¹⁰

For the entire limitation containing "communicatable with," two Defendants (InnoLux and TPV) would require the ID number to perform the additional unclaimed function "to identify a display unit." JCCS at A1 p.7. However, the limitation makes no reference to identifying the display unit itself; it only requires the ID number to identify the communicability of the display unit. In contrast, claim 27 of the '970 patent expressly requires the ID number to perform the function of "identifying the display unit." Thus, these Defendants' constructions not only are inconsistent with the ordinary meaning of the limitation but also run afoul of claim differentiation.

K. Limitations relating to identification

The parties dispute numerous limitations concerning identification ("ID") information or numbers. JCCS at A1 pp. 6-7. In general, the asserted claims address a hierarchy of information that may be contained in the display's memory. At the most general level, the memory stores "display unit information," which is simply information relating to the display unit. *See, e.g.*, '090 patent claim 1. At a more specific level, some claims require the memory to store "identification information" or an "identification number." *See, e.g.*, '970 patent claims 23 and 25. Other claims are yet more specific, and require the stored ID number to be capable of performing a certain function, such as "identifying the display unit" ('970 claim 27); "uniquely

¹⁰ *See* footnote 5 *supra*.

identifying the display unit” (‘090 claim 1); “identifying at least a type of said display unit” (‘180 claim 1); or “making the computer recognize that said display unit is communicatable with said computer” (‘970 claims 18-21).

Mondis’s proposed constructions reflect the ordinary meaning of these limitations and/or come *verbatim* from prosecution statements made by the Patent Owner to lexicographically define these limitations and distinguish prior art based on these proffered definitions.

All of InnoLux’s proposed constructions seek to add the unclaimed function that the ID information or number must be “used to determine whether to allow or not allow control of the display unit.” JCCS at A1 pp. 6-7. This construction does not define what an “ID number” is, but instead improperly imports functions of the ID number from preferred embodiments into the claims. This is especially improper considering that the claims themselves clearly set forth what functions, if any, the ID number or information is required to perform. Additionally, certain claims already require the ID number to perform the function of indicating whether or not the display can be controlled and thus differentiation suggests that InnoLux’s construction is erroneous. *See, e.g.*, ‘970 patent claims 18-21 (“identification number for making said computer recognize that said display unit is communicatable with said computer”). Notably, neither of the other two Defendants joins InnoLux’s attempt to import this unclaimed function into the claims. Mondis’s constructions should also be adopted for the additional reasons set forth below.

1. “identification number” / “identification number of the display unit”

There is no reasonable dispute that the ordinary meanings of “an identification number” and “an identification number *of* the display unit” simply refer to a number that is associated with the identity of the display. *See* Exhs. 30 and 32 (dictionary definitions for “identification” and “identify”). The Defendants, however, advance constructions that require the number “*to* identify the display unit” or “distinguish the display unit from any other display unit.” JCCS at

A1 p.6. Thus, the Defendants seek to import the unclaimed function that the ID number must affirmatively identify the display unit from among other display units rather than merely be a number associated with the identity of the display unit. Defendants' constructions have no support from the claims themselves and, in fact, run afoul of claim differentiation since the claims in the '090 family clearly set forth the functions of the ID number, and there are other claims that require the ID number to be used "for [uniquely] identifying the display unit." *See, e.g.*, '090 patent claim 1 and '342 patent claim 1. In addition, while certain preferred embodiments utilize the ID number to identify a particular display unit, the specification also mentions ID numbers generically as numbers being stored in the memory of the display unit. *See FIG. 2* (memory map showing storage of "Registered ID Numbers").

Finally, during prosecution, the term "identification number" was stated to include, for example, a "model number." A model number is plainly an "identification number" and an "identification number *of* [i.e., associated with] the display unit." *See* Exh. 29 ('970 reexamination response) at MTL 171042¹¹; Exh. 33 ('970 prosecution amendment) at MTL 154221-2. Yet Defendants' constructions would exclude a model number as not identifying the display unit itself (since there can be multiple display units of a given model).

2. "identification information" / "identifying information of the display unit"

The key dispute for these limitations is similar to those for the previous limitations. Defendants' constructions add unclaimed functional requirements that the identification information *of* the display unit must be used "*to identify*" a display unit from among other display units. JCCS at A1 p.6. InnoLux again further requires that the identification information

¹¹ *See* footnote 5 *supra*.

be used to determine the controllability of the display. Defendants' constructions should be rejected for the reasons articulated previously, *i.e.*, they do not reflect the ordinary meaning of the limitations and violate principles of claim differentiation. Indeed, the term "information" in these limitations is even broader than the term "number" used in the foregoing limitations.

3. "identification number for identifying the display unit"

Mondis's construction – "a number for identifying the display unit itself as opposed to just the type or capabilities of the display unit" – reflects the ordinary meaning of the limitation because here the limitation expressly requires the ID number to identify the display unit itself, as opposed to identifying aspects of the display unit such as its type or technical capabilities. JCCS at A1 p.6. An example is given by FIG. 5 of the specification and the accompanying description at 7:11-26 (display units 6B, 6C and 6D are assigned ID numbers 1, 2 and 3, respectively).

During prosecution, the Patent Owner presented this ordinary meaning construction to the PTO at least twice while distinguishing prior art. Exh. 34 ('342 reexamination response) at MTL 182538 ("The plain meaning of the claims requires the identification number to identify the display unit itself as opposed to just the type or capabilities of the display..."); *id.* at 182539 ("...is a number that refers to the display unit itself rather than communicated information about the type or capabilities of the display."). In addition, during prosecution of the '180 patent, the Patent Owner explained that an ID number for identifying the display unit was different from "characteristic information" of the display unit, which was claimed separately in other claims. Exh. 35 ('180 prosecution amendment) at MTL 008772. In addition, the Patent Owner distinguished the Sawdon reference on the basis that the disclosed ID codes merely represented the timing parameters for the display as opposed to identifying the display unit itself. *Id.* at MTL 008774. Hence, Mondis's construction reflects a lexicographic choice that was explicitly made during prosecution.

4. “identification number for uniquely identifying the display unit”

This limitation is similar to the previous one but also includes the adverb “uniquely” in front of the functional verb phrase “identifying the display unit.” JCCS at A1 p.7. The specification provides examples in which the ID number is used as a security feature to prevent “careless display” of information on an unauthorized display unit. 7:5-10. This security feature is facilitated when the ID number uniquely identifies a specific display unit from among others. If multiple displays within a pertinent group shared the same ID number, it would be difficult to limit display to a single authorized monitor. The specification also gives an example of ID numbers that uniquely identify a specific display within a set of structurally identical displays (e.g., same model). *See FIG. 5; 7:11-36* (describing the assignment of unique ID numbers to each of three display units, wherein the display units have the “same structure”).

Importantly, during prosecution the Patent Owner distinguished prior art by providing the same definition for this limitation that Mondis proposes here. *See* Exh. 36 (‘090 reexamination response) at MTL 158986 (“...‘an identification number for uniquely identifying the display unit’ is a number that can distinguish one specific display unit from another such as, for example, a serial number”); *see also id.* at 158980 (“a number for uniquely identifying a display unit discriminates between individual display units”). Hence, the Patent Owner chose to provide a particular ordinary meaning construction during prosecution and this lexicographic choice should be adopted by the Court. Notably, after providing the aforementioned construction, the Patent Office confirmed the patentability of the claims over the prior art. *See* Exh. 37 (Notice of Intent to Issue Reexamination Certificate).

5. “identification number for identifying at least a type of said display unit” etc.

There is no reasonable dispute regarding the ordinary meaning of these limitations, which

is reflected in Mondis's proposed construction. TPV agrees. JCCS at A1 p.7. The specification provides examples of different display types. *See* 4:31-33 ("cathode-ray tube"); 8:56-57 ("liquid crystal"). The Patent Owner also gave examples when characterizing the Moriconi reference during prosecution. Exh. 36 ('090 reexamination response) at 158988 ("Moriconi identifies the display module types as including 'transreflective,' 'standard monochrome,' and 'passive color'.").

InnoLux once again seeks to import the wholly unclaimed and unrelated function that the ID number for the type of display unit must also be used to determine whether the display can be controlled by the computer. JCCS at A1 p.7. However, as claim 21 of the '180 patent makes clear, the Patent Owner separately claimed the controllability aspect of the invention with a separate limitation when desired. If InnoLux's construction were correct, it would render the functional limitation of the communication controller in claim 21 ("capable of...receiving a control signal...and said displayed image is controlled") superfluous.

V. CONCLUSION

Mondis respectfully requests that the Court adopt Mondis's proposed claim constructions and the parties' agreed constructions as set forth in the Joint Claim Construction Statement.

DATED: October 25, 2010

Respectfully submitted,

/s/ Jeffrey B. Plies

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CERTIFICATE OF SERVICE

I hereby certify that the foregoing document was filed electronically in compliance with Local Rule CV-5(a). As such, this document was served on all counsel who have consented to electronic service. Local Rule CV-5(a)(3)(A). Pursuant to Federal Rule of Civil Procedure 5(d) and Local Rule CV-5(e), all other counsel of record not deemed to have consented to electronic service were served with a true and correct copy of the foregoing by certified mail, return receipt requested, on October 25, 2010. I am also sending a courtesy copy via e-mail to all of the below-listed recipients.

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